

## BIT-EDGE ZERO FORCING EQUALIZER

ABSTRACT OF THE DISCLOSURE

Bit-Edge Zero Forcing Equalizer. A novel solution is presented by which a BE-ZFE (Bit-Edge Zero Forcing Equalizer) is employed to drive an error term within a data signal to an essentially zero value. This new BE-ZFE looks at values of data that occur at the bit edges of a data signal and drives the associated error term to zero. The new BE-ZFE is appropriately implemented within communication systems that are phase (or jitter) noise limited. Some examples of such communication systems include high-speed serial links one type of which serviced using a SERDES (Serializer/De-serializer) where data that is originally in a parallel format is serialized into a serial data stream and then subsequently de-serialized back into a parallel data stream.